

AMENDMENT TO THE SPECIFICATION

Please amend paragraphs 0017, 0039, 0063, 0064, and 0068 as follows:

[0017] With reference to FIGS. 1 and 2, a surfboard, in a known fashion, is in the form of an elongated board with a central portion 2, a tapered and slightly turned up front shovel 3, or nose, and a slightly turned up tail 4 and with a reduced width.

[0039] In the present case, the central partition 11 is made of foam or wood, for example. It extends over the length of the shell. The shell 10 is formed around this partition. Possibly, the partition is edged with two layers 13 and 14 of resin-impregnated fibers, which are continuously connected to the wall of the shell. In the variation shown in FIG. 7a, a plurality of partitions 11' is provided. If the possibility of layers 13 and 14 is not employed, the partition, such as a foam partition, is utilized as shown in FIG. 14, described further below. The constituent material of the partition 11, i.e., the foam, wood, or other material, as mentioned above, is shown in the illustrated embodiments as extending continuously along the height of the partition in the illustrated embodiments and, thereby provides the reinforcement function for the partition. Also, in the illustrated embodiments, shown in FIGS. 7 and 14, for example, all of the foam of the partition is continuous along the width and height of the foam.

[0063] According to a particular embodiment of the invention, whether one or more inner partitions are employed, the partition is made of a material which is elastic or visco-elastic, such as a foam, as mentioned above regarding partition(s) 11, 11'. More particularly according to a particular embodiment, the partition is made of foam which is elastic or visco-elastic, so as to permit a differential deformation of the upper half-shell and of the lower half shell. Indeed, the use of an elastic foam permits, when the surfer exerts a pressure with his foot on the upper surface of the board (which he does for example to initiate a turn), the pressure to cause the deck of the board to deflect, or "sink," under the foot, that is to deflect vertically, not due to the compression of the foam casing, but due to the flexion of the upper half-shell under the foot due to the compression of the foam of the partition.

[0064] Because of the elastic foam of the partition, this vertical deflection of the deck will not be entirely transmitted to the lower half-shell. Indeed, the elastic foam will absorb part of the deformation energy transmitted to the board by the foot, therefore minimizing the deformation of the hull in contact with the water (the shape of the hull indeed is important because it determines the behavior of the board on the water, and it should therefore not be too greatly affected by the surfer's movements). With a conventional board, where the foam blank is made of rigid polyurethane foam, and where the central partition is rigid (for example made of wood), the deck has almost no possibility to deflect under the foot, and almost all of the deformation of the deck translates into a similar deformation of the hull. Therefore, the use of an elastically deformable foam smoothens the board's response to the pressure exerted by the foot. Moreover, and in particular embodiments in which no structural outer lining layer is applied along the height of the foam partition(s), or even along a majority of the height of such foam partition(s), as shown in FIG. 14, for example, the elastic or visco-elastic properties of the foam of the partition determine the nature of the response to pressures exerted by the foot.

[0068] The polypropylene foam can be an expanded polypropylene ~~a polypropylene~~ expanded particle foam (EPP) having a density of about 60kg/m^3 . Such a foam has compressive stress at 25% of deformation of around 350 kPa (measured according to ISO standard 844). Other tests have shown that similar foams having a density in the range of $20\text{-}100\text{ kg/m}^3$ and having a compressive stress at 25% of deformation in the range of 100-600 kPa are also suitable for use in the invention. Such mechanical characteristics of the foam permit sufficient support of the upper half-shell, while also permitting sufficient deflection. A foam that is too weak, like some polyethylene foams which have a strength of 5 to 20 times less than the above-mentioned EPP foam, would not provide enough support to the upper half-shell, leading to possible delamination or even to a breakdown. A foam that is too rigid will not permit enough deflection and will adversely affect the behavior of the board on the water.